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ALBERTA BIRD ATLAS NEWSLETTER

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ALBERTA BIRD ATLAS— Project Update!

As of January 1991, the **Alberta Bird Atlas Project** (ABAP) has completed four of the five years planned for data collection. (Time flies when you're having fun!) Unfortunately, based on the cumulative data from 1987-1990, the ABAP faces a **tremendous challenge** if it is to meet its September 1991 target date for completion.

Hence, after a number of **long** brainstorming sessions, which took into consideration the size and morale of Alberta's naturalist community in relation to the size and ecological diversity of the territory to be covered, the ABAP devised an action plan for the 1991 field season.

Action Plan

The 1991 plan comprises five data collection processes—offering volunteers a wide variety of opportunities to contribute—to produce a meaningful and credible atlas. (The key words here are **volunteers** and **contribute!**)

DATA FROM EXISTING SOURCES—During the ABAP time frame, 1987-1991, a number of government, non-profit and private bodies have undertaken various data collection activities: wildlife inventories, bird counts, studies, casual notes, etc. A province-wide campaign to identify and persuade individuals to pass on data that can augment the atlas data information base will be implemented. Carolyn Seburn, a research assistant through PEP, is already in place to assist in collecting and transcribing data onto cards for entry.

REGIONAL COORDINATORS/VOLUNTEER ATLASSERS—This approach represents the traditional method by which data have been collected since the project's inception. Our strategy for 1991 is to concentrate the efforts of the existing core of volunteers to completing squares further afield, and, to encourage volunteers in regions which are relatively well covered to atlas squares in neighbouring regions.

Additional squares in each region will be identified for local square-bashing field trips organized in collaboration with natural history or bird clubs.

GO FOR REMOTE!—For the northern-most half of the province, the ABAP is recruiting skilled, back country, experienced volunteer atlassers for 32 trips to remote areas of northern Alberta. Interested volunteers will work closely with head office to plan and execute successful expeditions that collect data from 34 priority blocks.

BLOCK-BUSTING TEAMS—Not unlike many other atlas projects that have had to devise final year thrusts to complete data collection, the ABAP must organize a series of block-busting teams to work in regions where volunteer manpower is insufficient. Employment programs such as STEP and SEED will give students the opportunity to spend an exciting summer in outdoors Alberta.

SECONDMENTS—Many of the active atlassers of the ABAP are employed by government agencies or major companies who are concerned about their image relative to the environment. A strategy to approach selected employers with a request to *loan* these staff members to the ABAP for one or two weeks was suggested by ABAP advisors.

An extension of this approach would see the incorporation of atlas priority squares into 1991 work plans and fieldwork conducted by participating agencies. STEP positions could also be instructed to provide some man-hours in support of the ABAP.

Conclusion

The strategy outlined above is meant to provide the methods by which a minimum target can be reached in 1991. This target relies heavily on **volunteers,** and hence is only limited by **your commitment!** I can't emphasize enough the importance of getting out and *covering your atlas square* in 1991. If we all increase our dedication to this project, the end result will not only be an enjoyable and attractive book about the birds of Alberta – but as well, we will have the satisfaction of knowing we contributed to a credible data base worthy of basing future resource management decisions on.

Most importantly, atlassing can be fun! So if one of the methods above appeals to you, or you've thought of another way to contribute, please feel free to contact the Alberta Bird Atlas Project head office at the Provincial Museum of Alberta (453-9163). We look forward to hearing from you soon! ❑

— Petra Stubbs, Project Manager

SHOUT
SHARE
IT

THANKS FOR '90... HERE COMES '91

It's hard to believe that here we are already anticipating the first few notes of spring, when it seems like only yesterday I finally cleaned up the needles from the Christmas tree!

In the past month, I've heard volunteers from across the province making up plans for the summer – exciting hot spots they're going to visit, favourite birds they're hoping to catch a glimpse of, and some of the fun things like canoeing, hiking and horseback riding that will be included with their plans.

But before we get too far into 1991, I think it's important to reflect a few moments on 1990.

The more I get involved with the Alberta Bird Atlas Project, the more I become impressed with the volunteer effort without which – this project couldn't exist.

There are few projects indeed, that can boast of such a determined and dedicated work force! The province is large. The difficulties at times seem insurmountable (especially when you're up to your knees in mud, the road you thought was underneath you has disappeared, and the mosquitoes are closing in for the kill...) but still our Atlassers find ways to succeed.

The result of this hard work to date has been a total of 1,926 data cards submitted to head office (and I know there's more out there, right Rick?). Approximately 553 priority squares have been visited at least once. The data base is growing and as you can see from the rest of this newsletter, preliminary work on maps and other aspects of publication are underway. All thanks to our volunteers!

Perhaps even more importantly, the data is beginning to be recognized as a credible source of information to researchers, managers, planners and developers. Both government and non-government agencies are realizing the value of a province-wide avian inventory not only for monitoring endangered and or other species, but also for monitoring the well-being of the very habitat that houses and feeds these species. (Of course, we knew that all along, didn't we?)

Somehow, saying 30 seconds of thanks to all of you for all your hours and hours of birdwatching doesn't seem like enough... I can only hope that it is thanks enough to know that you **are** contributing to a **very** worthwhile project and in the end, just enjoying the birds will be enough.

So for what it's worth – **Thank you for a great 1990!** But before we rest too long on our laurels, look out! ***Here comes '91!*** ❑

— Petra Stubbs, Project Manager

WHERE DOES IT ALL GO?

For four years now you've been slogging through the mud and feeding mosquitoes trying to find that elusive next bird nest to record for posterity. For four years now you've been dutifully (we hope) sending in your data cards. But where does it all go?

When you send in a data card to your regional coordinator the first thing that happens is that he or she looks it over, contacts you if there are problems and then sends it on to head office. When we receive the cards Petra checks them over and sends them to the computer. Finally, I check them over, add them to our summaries and store them in our files. In the near future I will begin soliciting species documentation forms where necessary.

But! Your data cards do not spend all their time in the dark recesses of a file cabinet because two or three times a month we receive a request for data from various sources. If the request is approved by the management committee your data may be sent out to aid research in a variety of ways. Here are some of the ways your data has been used in the past few months:

- COSEWIC status reports on the Sedge Wren, Long-billed Curlew and Northern Hawk Owl
- research on Purple Martins and House Finches
- a preliminary bird list for the new Ann and Sandy Cross Conservation Area
- and baseline data to assist the provincial government in the selection of candidate Natural Areas

Even before the Alberta Bird Atlas Project publishes, the data you collect is working hard to help protect the birds of Alberta. ❑

— Carolyn Seburn

LEND US YOUR DATA UPDATE

In the last newsletter we asked people to send in notes they had taken about birds seen outside their atlas square. We've also been contacting agencies throughout Alberta that may have data hidden away in filing cabinets which could contribute to the Atlas. Even though we have just started this campaign we have already had a tremendous response. Many of you responded to the note in the last newsletter with offers of data from your cottage or notebooks. Provincial and Federal government offices have been generous in offering us access to their data and Alberta Forestry offices have been especially enthusiastic. Although these sources of data rarely provide complete coverage of a particular square they can help fill in the gaps and often provide details on particular key species. Thanks to everyone who sent us information and keep looking for that elusive slip of paper where you jotted down the location of a nest you happened to stumble across. ❑

— Carolyn Seburn

CHECKING YOUR DATA CARDS

In reviewing the data cards we have received for the 1990 field season there are a number of recurring problems that I would like to point out. The proper use of abundance codes has always been a difficulty in the project and I would like to reiterate that values refer to the maximum number of **individuals** seen at one time. Therefore, if you see a pair or a nest with young, it is

not possible for the correct abundance code to be zero. Note also that the codes indicated ranges of values (i.e. code 1 means 2 to 10 individuals seen) not actual number seen.

Another common difficulty is the identifying feature of the square. This should be the name of the largest town, lake or river in or near the square. It has nothing to do with habitat. It is our way of being able to double check that the block and square assignment is correct.

Finally, there appears to be some confusion about the proper use of some of the breeding codes. When should H be used rather than X? X should only be used to imply that the bird seen is likely to be a migrant (because of the time period or habitat) or that it is thought to be only incidental to the square, perhaps breeding outside it (again because of lack of appropriate habitat). X could also be used if the individual is a subadult.

What about the use of N versus NB? As explained on the data cards, N should only be used for wrens and woodpeckers while NB should be used for all other species but not wrens and woodpeckers. The reason behind this is that both wrens and woodpeckers may build more than one nest. Male wrens build several nests and then try to convince a female to mate and lay eggs in one of them. Woodpeckers use nests not only for breeding but also for roosting. Therefore, in both cases, nest building behaviour only suggests probable breeding not confirmed breeding.

Lastly, territoriality can only be presumed if territorial behaviour is seen (or heard) in the same location on at least two occasions a week or more apart. Therefore codes of T cannot be accepted it the observer indicated that the site was only visited for one or a few days in a row.

Please keep these comments in mind when filling out your data cards for the 1991 season. The faster we are able to process your data the sooner we'll have an Atlas out for us all to enjoy. ❑

— Carolyn Seburn

GUIDELINES TO DETERMINE THE NUMBER OF EXPECTED SPECIES IN A SQUARE

[Petra and I thought the following excerpts from a letter Petra received from Iris Davies would be useful to many Atlassers.—Ed.]

Dear Petra,

I've been playing with the computer to try and get some information out to the Atlassers and I have the information for you on what I've been using for criteria to determine if squares are complete. I've been working straight out of the book and then checking what information I have on habitats, but I've also asked the Atlassers to give me their opinions. They may feel they've checked every habitat and seen all they will see or they may feel I've jumped the gun and there are more birds out there.

This is what I have sent the Atlassers. ***The guideline to determine the number of expected species in a square will be:***

1. If the square has a substantial amount of forest of various compositions and ages, count **60** species, unless there isn't any significant amount of deciduous forest, in which case count only **50** species. Subtract **5** species if there isn't any mature forest of large trees.

2. If there is permanent settlement add **5** species.

3. If there is extensive marsh land and sloughs add **25** species, but if there are only a few small marshy areas add **10.** If you haven't added anything for marshes, but have large areas of bog and fen, add **10** species. If both habitats are represented, add **30** species.

4. If there are areas of open water such as lakes and rivers add **15** species. If the square has both marsh land, sloughs and lakes, and rivers, add a total of **35** species.

5. If there is extensive prairie or lightly grazed grassland, add **25** species. If the grassland is heavily grazed, particularly in parkland areas, add only **15** species.

The square my family has been working on works out this way:

Substantial forest, all ages	60 species
Permanent settlement	5 species
Small marshy areas, sloughs and lakes	35 species
Heavily grazed grassland	15 species
Total	115 species
We expect to find **breeding evidence** for **75%** of these	87 species
There should be **50%** of these **confirmed**	44 species
There should be **35%** of these **probable**	30 species
There should be **15%** of these **possible**	13 species

Obviously it's time for us to move on, we have **breeding evidence – 98,** CO – **72,** PR – **8,** PO – **18.**

I expect between 20 or 30 fewer species for the squares in the southern area. For the squares which have extensive cultivated acres I have taken off between 20 (north) and 10 (south) species. ❑

— Sincerely yours, Iris Davies

RARE BIRD REPORT— Garganey

[The following are excerpts from a rare bird report sent in by Lloyd Bennett which I thought the readers would like to hear about. Ed.]

Dear Rob, May 14, 1990

I am making this report on the Garganey which I sighted May 6, 1990.

I was on my way to town to attend a church choir practice, and I took the longer route, so as to pass through the edge of my atlas square. About two and a half miles away from my home I passed a very shallow puddle in the ditch, which was about 50' long. In this puddle I noticed a duck the size of a teal. I thought at first it might be a hybrid between blue-winged and cinnamon teal; since it had a rusty head and neck and a white mark on the head. Using binoculars I was able to get a good look at the duck. Much to my sur-

...continued

prise and excitement, it was something that I had not seen before and had no idea what it was. So I said to myself, "I have to get a picture of this." I raced back home and got my camera but when I returned the duck flew away before I could get a picture. I then left and returned to the spot a couple of hours later. The duck had come back and was dabbling in the water. So I approached it very slowly, taking pictures as I went. Finally I was able to get about 50' away from it and get one last picture before it flew away to a small slough about 50 yards away. Here is the description as I recorded it.

The head and neck were brownish-rusty, not nearly so bright rusty as cinnamon teal but more brownish. It had a thick white line above the eye, which tapered down to a very thin line as it extended towards the back of the head; the two lines almost met. The chest was brown with small round spots very much like a male blue-winged teal, also the flanks were this colour. It had a large medium gray patch on the sides, about the same size as the chestnut patch on the shoulder. I don't remember other details about the back or wings. It seemed to be exactly the same size as the blue-winged teal and was found in the same habitat of shallow sloughs.

The weather conditions on that day were extremely windy and dusty, with limited visibility. It also became cloudy as the wind shifted from west to northwest. Under these conditions it was hard to get good pictures, but it did not affect the use of binoculars. My binoculars were 7-15 x 35 zoom, my camera lens a 300 mm. The location was about five miles north of Taber and three miles east. This is located in square No. VL22, in the Medicine Hat region. I was able to observe the bird for several minutes.

This is all that I can think of to report. I will send you a picture when they are ready. Thanks for helping me identify the bird, since I would have gone crazy not knowing what it was. Hope you have more good luck with the atlassing this year. ❑

— Yours truly, Lloyd Bennet

P.S. I found a pair of long-eared owls in VK19 (Chin Lake area). Hopefully I can find them nesting.

ALBERTA BIRD ATLAS DISTRIBUTION MAPS

Yes, we have finally done it! We are now not only able to see visually how many squares have been completed or just started (Figure 1) but we can also produce maps of any given species which shows the breeding status recorded to date. The maps in this article only present data which has been entered onto the computer. Thus some of the 1990 data is missing.

Figure 1 provides a partial picture of the level of completeness of each square that has been started and also where no data has been collected. As suspected the north still needs a lot of work to both complete squares and to initiate squares. Don't forget the results from a square completed in the north will be extrapolated to represent 10,000 sq. km. while a square in the south is extrapolated to only 100 sq. km. Thus a lot more coverage is required in the south than the north. The reader should

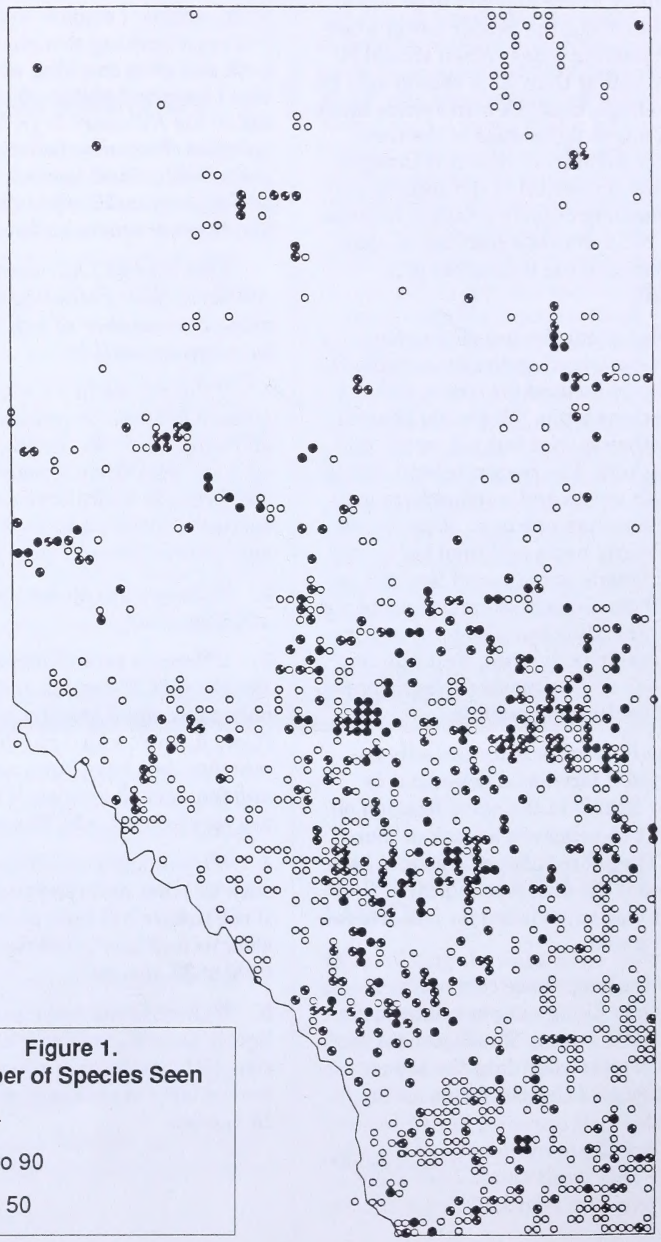
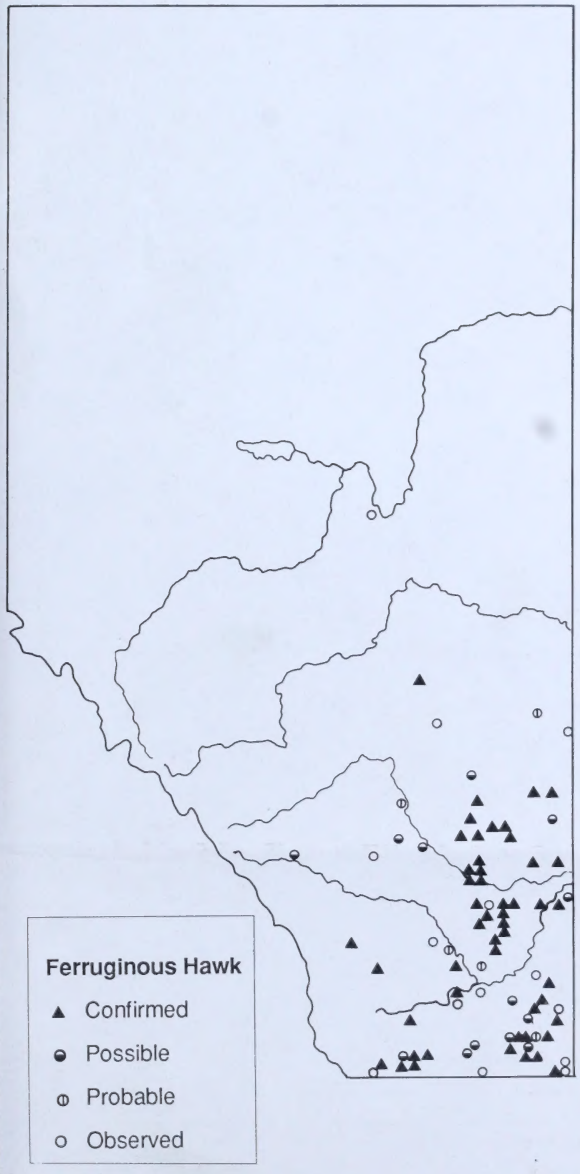


Figure 1.
Number of Species Seen

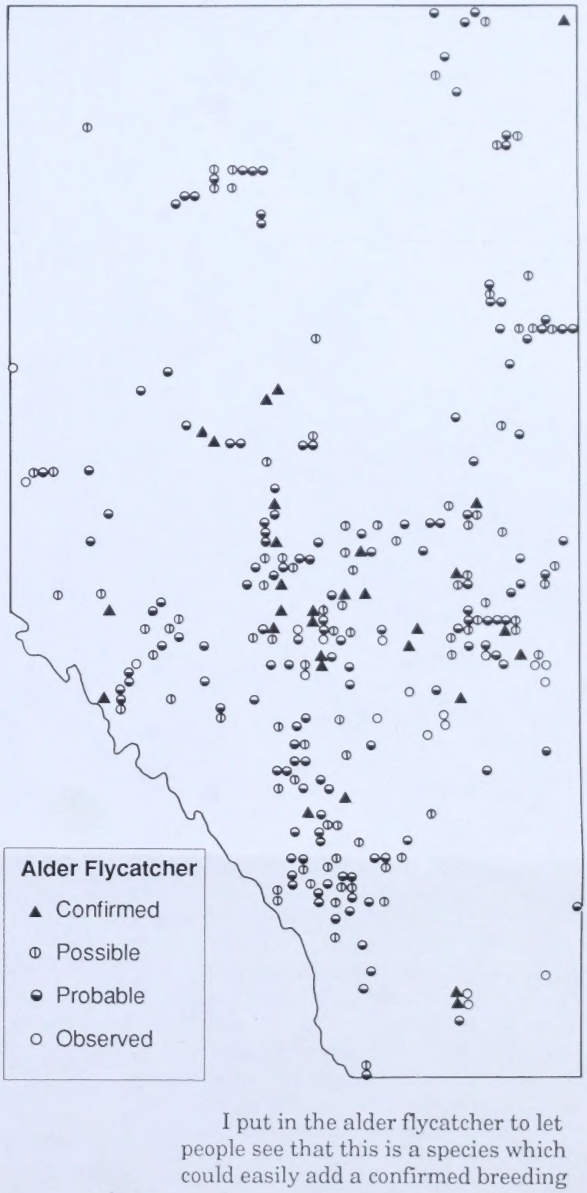
- 91+
- 51 to 90
- 1 to 50

also note that this map represents the number of species seen in a surveyed square and not the level of breeding status.

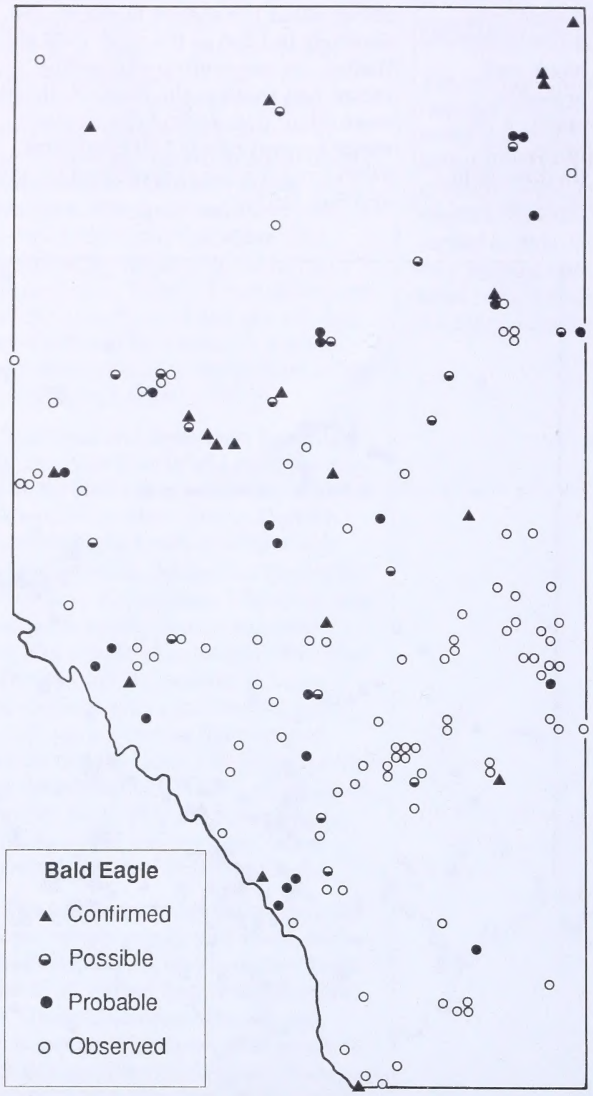
I have included species maps for only four species: the ferruginous hawk, bald eagle, alder flycatcher and the mallard. I found it interesting that of the 82 dots for ferruginous hawk, 49 are confirmed breeding and 13 were probable breeding status. Thus 75% of the squares that ferruginous hawk was observed in have at least probable breeding status. This is possibly a reflection of the interest shown to this species and the open terrain it nests in. Using only Salt and Salt (1976) as a reference to historical distribution, it is obvious that the species is distributed similarly in 1990 as it was in 1976 although the one confirmed breeding record just south of the North Saskatchewan River does extend the breeding range approximately 100 kilometres north from the range presented by Salt and Salt (1976).

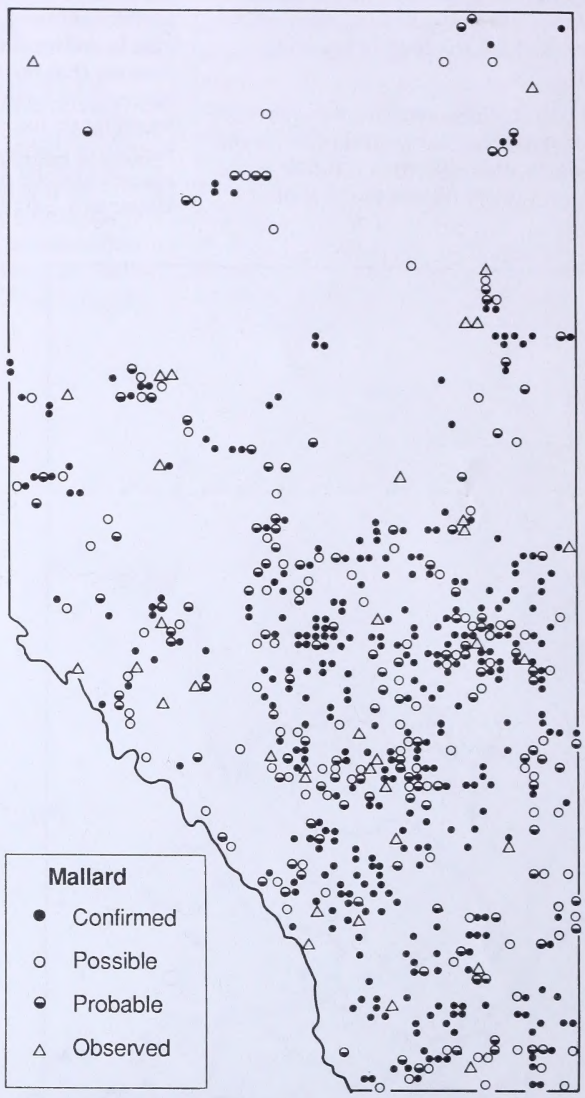


Please note change in legend symbols



I put in the alder flycatcher to let people see that this is a species which could easily add a confirmed breeding species to your square, especially in central and southwestern Alberta. It is in the north as well. But what is happening in the southeast? Salt and Salt (1976) record alder flycatcher as breeding throughout Alberta.





Please note change in legend symbols

The bald eagle map is really interesting when compared to Salt and Salt (1976). We have numerous confirmed and probable breeding records southeast of the Athabasca River. Salt and Salt (1976) report that the bald eagle formerly nested across the prairies but at the time of writing was confined to the Rocky Mountains and the northern half of Alberta.

I threw the mallard in just to show everyone that even the common species can use some more work.

I hope this will encourage everyone to get out this year and flog the bushes and ponds of Alberta and to send in those field notes since even that Mallard nest you saw might be important. ❑

References: W.R. Salt and J.R. Salt, 1976. The Birds of Alberta. Hurtig Publishers, Edmonton.

— Loney Dickson

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